DOCUMENT RESUME

ED 331 946 UD 028 071

AUTHOR Gold, J.; And Others
TITLE Student Adaptation to College as a Predictor of Academic Success: An Exploratory Study of Black Undergraduate Education Students.
PUB DATE 90
NOTE 20p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; *Adjustment (to Environment); *Black Students; *College Freshmen; Education Majors; Higher Education; Multiple Regression Analysis; Questionnaires; *Sex Differences; Success
IDENTIFIERS *Student Adaptation to College Questionnaire

ABSTRACT

The purpose of this study was to investigate the relationship between the perceptions of black undergraduate students of their adjustment to a predominantly white university and academic success. The responses of a sample of 29 black freshman education majors at a midwestern university on the Student Adaptation to College Questionnaire (SACQ) were correlated with the students' grade point averages (GPA) using multiple regression analyses. Twenty-three of the students were female and six were male. The following findings are presented: (1) total SACQ scores were significantly related to GPAs; (2) scores on the academic adjustment subscale were significantly related to GPA for females; and (3) scores on the personal-emotional adjustment subscale were significantly related to GPA for males. The findings suggest that personal counseling, tutoring, and general skill-building would be appropriate activities to support black female students, while peer/mentor support activities would be appropriate for black males. Statistical data are presented in three tables. A list of 28 references is appended. (FMW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED331946

STUDENT ADAPTATION TO COLLEGE AS A PREDICTOR OF ACADEMIC SUCCESS: AN EXPLORATORY STUDY OF BLACK UNDERGRADUATE EDUCATION STUDENTS

J. GOLD

S. BURRELL

C. HAYNES

D. NARDECCHIA

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joshua M. Gold
Kent State U.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ☑ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

UD 028 071

STUDENT ADAPTATION TO COLLEGE

AS A PREDICTOR OF ACADEMIC SUCCESS:

AN EXPLORATORY STUDY OF BLACK UNDERGRADUATE EDUCATION STUDENTS

The lack of black student success on predominantly white campuses has attracted a great deal of recent attention (Patrick, Furlow & Donovan, 1988; Patten, 1988; Pounds, 1987; Ruddock & Wilkinson, 1983; Wright, 1987). This recent attention has specified the quality of the freshman experience as predictive of student retention and, therefore, successful progression through college (Earl, 1988; Kelly & White, 1986; Kramer, Taylor, Chynoweth & Jensen, 1987; Siryk, 1981).

Freshman students arrive on campus with a myriad of unrealistic expectations regarding academic, social, and personal adjustment to college (Hart & Keller, 1980). Overly optimistic grade expectations are balanced by an underestimation of the weight of required reading, course assignments, and study time. Levels of present study skills are consistently over-valued. Initial choice of a major seems dubious, with 82% of students expected to change fields of concentration at least once in their college career. Issues of roommate conflict, loneliness, alienation, and nostalgia are often unanticipated by freshman students (Erwin & Kelly, 1985; Kramer & Hardy, 1985).

Black students arrive on campus with developmental issues similar to those of non-minority students; eg: adjustment to college, separation from family, development of autonomy,

establishment of academic and intellectual competencies, creation of healthy sex roles and sexual identity, development of career/lifestyle plans, formulation of an integrated philosophy of life, and the development of cultural awareness and esthetics (Allen, 1984; Chambliss, 1989; Pounds, 1987; Siryk, 1981; Wright, 1987). However, the high attrition rates of black students at predominantly white colleges demands further study to identify those issues critical to student retention. This study seeks to identify factors that may significantly influence black student adjustment to college.

Tinto (1975, 1982, 1987) hypothesized that the interaction between the student and environment over time contributes to student retention or attrition. The degree of integration into the academic life and the social life of the institution is forecast to impact on the student's sense of institutional commitment. Accordingly, positive institutional commitment is theorized to be predictive of student retention. Previous empirical research has supported the specification of levels of academic and social adjustment to the college experience as significant predictors of black student success in college (Allen, 1984; Hart & Keller, 1980; Kenny, 1987; McClung, Waddle & Harris, 1988; Ruddock & Wilkinson, 1983; Siryk, 1981; Stake, 1984; Terenzini & Wright, 1987).

These findings reflect the use of several varying instruments to assess student adjustment. Thrasher and Bloland's (1989) review of published research discovered a multitude of

measures used to weigh differing factors in the transition/success process; eg: interpersonal relationships, self-concept, cognitive development, and academic success. Previous studies have tended to isolate adjustment factors to investigate their respective relationships to academic success. This study presumes an interrelation of adjustment variables and their attendant relationship to college success. Previous instruments, eg: the College Student Experiences Questionnaire, have sought to quantify student experiences along select barometers. This study seeks to qualify student experience through student perception of their college experiences.

The purpose of this study is to investigate the relationship between the perceptions of undergraduate black students of their adjustment to a predominantly white university and levels of academic success. If successful, the study may provide a means to identify at-risk students early in their freshman experience. This early identification is seen as crucial for appropriate preventive and remedial intervention. The study poses the following hypotheses:

1. There will be no significant relationship between adjustment to college, as measured by the Student Adaptation to College Questionnaire (SACQ), developed by Baker and Siryk (1989), and academic success, as measured by college GPA, for the entire sample and by gender.

2. No SACQ subscales will significantly predict academic success for male and female students.

METHODOLOGY

Sample:

The sample for this exploratory study consisted of 29 black, freshman Education students at a mid-sized, midwestern university. The sample consisted of 23 (79.3%) women students and 6 (20.7%) male students.

Data Collection:

Based on the College of Education's commitment to recruit and retain under-represented student populations, the Office of Student Life monitors black student progress in the college, especially of freshman and sophomore students. Routinely, student GPA are provided to the office's counselors. Recently, the SACQ was implemented as a tool for clinical assessment in that office to provide additional information on the success of student adaptation to college. Permission was gained for the researchers to access these two sources of information at the end of the fall semester, 1989. This approval was contingent on the assurance of the confidentiality of information. This condition was met through the reporting of group data only.

Dependent Variable:

For the purposes of this study, academic success was measured by cumulative college grade point average. This university employs the five-point A-F scale. This classification is described as a widely-utilized grading system (Locher, 1989).

Independent Variable:

Student adjustment to the college environment is theorized to incorporate several variables. This study contends that the recognition of the interaction between adjustment variables provides increased information on student progression towards adjustment and may be further used as the foundation for educational/preventive programs and remedial interventions. To assess this process of inter-related adjustment, the Student Adaptation to College Questionnaire (SACQ), developed by Baker and Siryk (1989), was employed.

The SACQ is a 67-item, self-report that can be completed in less than 30 minutes and scored by hand. The measure consists of four subscales that can be totaled to provide an over-all picture of student integration in college. One subscale, academic adjustment, consists of 24 items designed to ascertain student response to the educational demand characteristics of college. The subscale can be cluster analyzed in terms of student motivation, application, performance, and satisfaction with the academic environment. Lower scores on this subscale have been shown to be associated with lower freshman GPA, provisional

acceptance to college due to low high school GPA, being on academic probation, and feelings of lack of control by the student concerning educational outcomes (Baker & Siryk, 1989).

The second subscale, social adjustment, is comprised of 20 items intending to assess student response to the interpersonal/social demands of college. Cluster analysis reveals information on student social functioning in general, involvement and relationships with other persons on campus, nostalgia (a longing for past social systems), and personal satisfaction with the social aspects of the college experience. Lower scores on this subscale have been shown to be associated with less participation in college social activities, less success separating from home, a greater sense of loneliness, greater social avoidance, less success at coping with life changes, and less social self-confidence (Baker & Siryk, 1989).

The third subscale, personal-emotional adjustment, includes 15 items seeking levels of physical and psychological distress. Lower scores on this subscale have been shown to reflect greater emotional reliance on other persons, fewer psychological coping resources, lesser degrees of mental health, and greater negative experience of life events (Baker & Siryk, 1989).

The fourth subscale, goal commitment/institutional attachment, numbers 15 items. The scale seeks to determine the student's feelings of satisfaction with college in general and with the particular school chosen. Lower scores on this subscale have been shown to reflect less satisfaction with the college

experience and a greater probability of attrition (Baker, 1986; Baker & Siryk, 1989).

In scoring the instrument, each response contributes towards the over-all adjustment score. The scores of sixty-five items contribute towards one subscale score. Nine item scores contribute to two subscale scores and two item scores only contribute to the total adjustment score.

In terms of the psychometric properties of the SACQ, Cronbach alpha's have been established for the total instrument of .92-.95. Subscale alpha's have been determined as .81-.90 for the academic subscale, .83-.91 for the social adjustment subscale, .77-.86 for the personal-emotional subscale, and .85-.91 for the attachment subscale (Baker & Siryk, 1989).

Test validity has been established in three domains. Examples provided in the area of personality characteristics show significant relationships between SACQ scores and goal instability (Schwitzer & Robbins, 1986; $p<.01$), psychological coping resources (Savino et al., 1986; $p<.01$), self-esteem (Saracoglu, 1987; $p<.01$), and social avoidance and distress (Caro, 1985; $p<.01$). Significant relationships have also been determined between SACQ scores and measures of mental health; ex: Mental Health Inventory by Flescher (1986), $p<.01$); the Depression Scale by Adan and Felner (1987), $p<.01$; and the Tennessee Self-Concept Scale also by Adan and Felner (1987), $p<.01$. Similar levels of significance have also been established with measures of environment-related experience; ex: the Life

Experiences Survey ($p<.05$) and the Adolescent Hassles Scale ($p<.05$). All constructs were tested on black students in an integrated university, in addition to black students at a black college and white students at a predominantly white school (Baker & Siryk, 1989).

Smith and Baker (1986) used the SACQ measures as the dependent variable in a comparison of freshman students who had and had not decided on an academic major. Results showed significant differences ($p < .05$) between groups on all measures except academic adjustment. The authors discussed the impact of academic adjustment and choice of a major on attachment clusters, linking these factors to student retention.

Cooper and Robinson (1988) used the SACQ to investigate the "freshman myth", that entering students tend to present overly optimistic expectations of their upcoming college experience. The study hypothesized that discrepancy between anticipated and actual experience would be negatively related to GPA and retention, and positively to use of campus psychological services. The sample consisted of 302 freshman science and engineering students. The SACQ was administered in June to gather expectations and again in October to reflect actual adjustment. The results revealed significant support ($p<.001$) for all three study hypotheses.

These studies support the predictive validity of this instrument with measures of academic adjustment, academic success, and student retention.

Statistical Analyses:

The first hypothesis predicted no significant relationship between adjustment to college and academic success. The testing of this hypothesis required three separate correlations of SACQ total score, subscales and GPA for the entire sample and for female and male students. The results of the correlations by gender would be further supported by the multiple regression equations calculated in response to the second hypothesis, forecasting no significant predictors of academic success for female or male students.

RESULTS

The review of the data presented the following demographic information. Grade-point average at this university can range from 0-4.00. The sample presented a wide range of cumulative grade-point averages 0.66-3.66 (X=2.29, sd.=.79). Total SACQ scores can range from 67-603. This sample presented a range of 310-548 (X=449.62, sd.=60.91). Of a possible range of 24-216 on the academic adjustment subscale, this sample presented a range of 98-212 (X=159.76, sd.=24.18). While the social adjustment subscale offers a potential range of 20-180, this sample produced a range of 99-171 (X=135.28, sd.=22.09). Scores on the personal-emotional subscale can range from 15-185. This sample revealed a range of scores of 51-132 (X=97.31, sd.=24.79). The attachment subscale offers a potential range of 15-135. Sample scores ranged from 59-135 (X=110.48, sd.=20.09).

The first hypothesis predicted no significant relationship between adjustment to college and academic success. In response to this hypothesis, three correlations between total and subscale SACQ scores and GPA were calculated.

Table 1

CORRELATIONS BETWEEN SACQ SCORES AND GPA FOR THE ENTIRE SAMPLE

Adjustment Subscales

	GPA	TOTSACQ	ACADEM	SOCIAL	EMOTION	ATTACH
GPA		.4591*	.4798**	.1845	.0890	.2128
TOTSACQ	.4591*		.4122*	.7750***	.4242*	.8728***
ACADEM	.4798**	.4122*		.1042	.0843	.3971*
SOCIAL	.1845	.7750***	.1042		.2684	.7706***
EMOTION	.0890	.4242*	.0843	.2684		.2812
ATTACH	.2128	.8728***	.3971*	.7706***	.2812	

* $p<.05$; ** $p<.01$; *** $p<.001$

For the complete sample, results indicate a significant correlation between total SACQ scores and GPA ($p<.05$) and specify the degree of academic adjustment as the most significant subscale correlate ($p<.01$). (See Table 1).

Table 2

CORRELATIONS BETWEEN SACQ SCORES AND GPA FOR FEMALE STUDENTS

			Adjustment Subscales			
	GPA	TOTSACQ	ACADEM	SOCIAL	EMOTION	ATTACH
GPA		.3903	.4627*	.1925	- .0262	.1266
TOTSACQ	.3903		.3935	.8208***	.3191	.8608
ACADEM	.4627*	.3935		.1092	.0394	.3776
SOCIAL	.1925	.8208***	.1092		.2185	.8008***
EMOTION	- .0262	.3191	.0394	.2185		.1800
ATTACH	.1266	.8608***	.3774	.8008***	.1800	

* p<.05; ** p<.01; *** p<.001

Consistent with Tinto's (1987) hypothesis, academic adjustment is designated as the sole subscale predictor of GPA women.(See Table 2). In response to the second hypothesis, the multiple regression equation also specified this subscale as the significant predictor of academic success for women (R^2=.23026; p<.01).

Table 3

CORRELATIONS BETWEEN SACQ SCORES AND GPA FOR MALE STUDENTS

			Adjustment Subscales			
	GPA	TOTSACQ	ACADEM	SOCIAL	EMOTION	ATTACH
GPA		.8302*	.7259	.1866	.8578*	.7765
TOTSACQ	.8302*		.7951	.6079	.9906***	.9621**
ACADEM	.7259	.7951		.1862	.7594	.6763
SOCIAL	.1866	.6079	.1862		.5482	.7304
EMOTION	.8578*	.9906***	.7594	.5482		.9380**
ATTACH	.7765	.9621**	.6763	.7304	.9380**	

* $p<.05$; ** $p<.01$; *** $p<.001$

These findings also support Tinto's (1987) hypothesis suggesting personal-emotional adjustment as a significant predictor of academic success ($p<.05$). (See Table 3). In response to the second hypothesis, the multiple regression calculation also specified personal/emotional adjustment as the significant predictor of GPA for male students ($R^2=.73574$; $p<.03$).

DISCUSSION

The results of this study support the validation of the SACQ responses as significant predictors of academic success. The initial hypothesis predicting no significant relationship between variables was not supported. Significant relationships were discovered between total SACQ scores and college grade point

average ($p<.05$) and between levels of academic adjustment and GPA ($p<.01$). The second hypothesis forecast that SACQ subscale scores will not significantly predict academic success of female or male students. However, this hypothesis was not supported as the multiple regression calculation revealed academic adjustment as the significant predictor of GPA for female students ($p<.01$) and personal-emotional adjustment as the significant predictor of academic success for male students ($p.<.03$).

For female students, success in coping with the educational demand characteristics of college seems predictive of academic success. This finding suggests that levels of motivation (attitudes towards academic goals, course work and educational purpose); application (levels in success in meeting academic course requirements); performance (levels of academic success); and satisfaction with the academic environment are related to higher levels of academic success. Intervention in this area may include personal counseling around self-perception as a college student, tutoring in specific subjects, and generic skill building in such areas as study skills, time management, and term paper writing.

Male students present concerns focusing on emotional reliance, coping resources and negative experiences of life events. Academic success seems reflective of greater degrees of emotional self-reliance and the effectiveness of personal psychological coping resources. Recognizing the reluctance of male students to self-refer to campus counseling services, and

their need for peer/mentor support, identification of male students with low levels of academic success may necessitate creation of ongoing support systems, leading purposefully to the development of emotional self-reliance.

This exploratory study offers six implications for practice. The brevity of the instrument and its self-scoring capacity make the SACQ an attractive option for counseling centers, residence halls, etc. Its established predictive validity allows for early recognition of potentially at-risk students. The scale's three levels of analysis; total score, subscales, and cluster analysis, offer differing opportunities for exploration with students.

This course of pursuit establishes students as the most accurate evaluators of their college experience. The focus seeks not to disavow the quantity of interaction between student and environment but to add the component of student perception of quality/satisfaction. This study offers the potential for additional attention to retention efforts and, through these efforts, to the graduation rates of black students at predominantly white universities.

REFERENCES

Allen, W.R. (1984). Survey of black undergraduate students attending predominantly white, state-supported universities. (ERIC Document Reproduction Service No. 252 615).

Baker, R.W. (1986). The Student Adaptation to College Questionnaire and its use in an intervention study with freshmen. (ERIC Document Reproduction Service No. 276 928).

Baker, R.W. & Siryk, B. (1989). SACQ manual. Los Angeles: Western Psychological Services.

Chambliss, C. (1989). Comprehensive freshman advising: The Ursinus College freshman advising program: Three-year follow-up. (ERIC Document Reproduction Service No. 304 968).

Cooper, S.E. & Robinson, D.A.G. (1988). Psychometric properties of the Student Adaptation to College Questionnaire with engineering and science students. Measurement and Evaluation in Counseling and Development, 21, 124-129.

Earl, W.R. (1988). Intrusive advising of freshmen in academic difficulty. NACADA Journal, 8(2), 27-33.

Erwin, T.D. & Kelly, K. (1985). Changes in students' self-confidence in college. Journal of College Student Personnel, Sept., 395-400.

Hart, D. & Keller, M.J. (1980). Self-reported reasons for poor academic performance of first-term freshmen. Journal of College Student Personnel, Nov., 529-534.

Kelly, J.J. & White, E.R. (1986). Profiling freshmen academic characteristics. (ERIC Document Reproduction Services No. 284 458).

Kenney, M.E. (1987). Family ties and leaving home for college: Recent findings and implications. Journal of College Student Personnel, Sept., 438-442.

Kramer, G.L. & Hardy, H.N. (1985). Facilitating the freshman experience. College and University, Spring, 242-252.

Kramer, G.L., Taylor, L., Chynoweth, B., & Jensen, J. (1987). Developmental academic advising: A taxonomy of services. NASPA Journal, 24(4), 23-31.

Locher, N.C. (1989). Academic standing: Its definition and implementation at twenty-five small liberal arts institutions. College and University, Spring, 246-259.

McClung, J.J., Waddle, G.L., & Harris, S.V. (1988). A study to identify factors that contribute to black student withdrawal at Clemson University. (ERIC Document Reproduction Service No. 300 483.

Patrick, J., Furlow, J.W., & Donovan, S. (1988). Using a comprehensive academic intervention program in the retention of high-risk students. NACADA Journal, 8(1), 29-31.

Patten, J.O. (1987). Black men: Missing in higher education. (ERIC Document Reproduction Service No. 297-043).

Pounds, A.W. (1987). Black students' needs on predominantly white campuses. In D.J. Wright (Ed.). Responding to the needs of today's minority students (pp. 23-38). San Francisco: Jossey-Bass.

Ruddock, M.S. & Wilkinson, C.Y. (1983). Retention: What happens during the freshman year? (ERIC Document Reproduction Service No. 232 589).

Siryk, B. (1981). Identification of high-risk college students. (ERIC Document Reproduction Service No. 210 973).

Smith, M.A. & Baker, R.W. (1986). Freshman decidedness regarding academic major and adjustment to college. (ERIC Document Reproduction Service No. 276 929).

Stake, J.E. (1984). Educational and career confidence and motivation among female and male undergraduates. American Educational Research Journal, 21, 565-578.

Terenzini, P.T. & Wright, T.M. (1987). Students' personal growth during the first two years of college. The Review of Higher Education, 10, 259-271.

Thrasher, F. & Bloland, P. (1989). Student development studies: A review of published empirical research, 1973-1987. Journal of Counseling and Development, 67, 547-554.

Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. Review of Educational Research, 45, 89-125.

Tinto, V. (1982). Limits of theory and practice in student attrition. Journal of Higher Education, 53, 687-700.

Tinto, V. (1987). Leaving college: Rethinking the causes and cures of student attrition. Chicago: University of Chicago Press.

Walsh, R.W. (1985). Changes in college freshmen after participation in a student development program. Journal of College Student Personnel, July, 310-314.

Wright, D.J. (1987). Minority students: Developmental beginnings. In D.J. Wright (Ed.). Responding to the needs of today's minority students (pp. 5-23). San Francisco: Jossey-Bass.